# Xamarin Le Application Development Cross Platform C And Xamarin Forms Fundamentals

*Practical Software Architecture Solutions from the Legendary Robert C. Martin ("Uncle Bob") By applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin ("Uncle Bob") reveals those rules and helps you apply them. Martin's Clean Architecture doesn't merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you've come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you'll face-the ones that will make or break your projects. Learn what software architects need to achieve-and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what's critically important and what's merely a "detail" Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager-and for every programmer who must execute someone else's designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.*

*The proceedings consists of 30 papers which have been selected and invited from the submissions to the 2nd International Conference on Computer Science, Applied Mathematics and Applications (ICCSAMA 2014) held on 8-9 May, 2014 in Budapest, Hungary. The conference is organized into 7 sessions: Advanced Optimization Methods and Their Applications, Queueing Models and Performance Evaluation, Software Development and Testing, Computational Methods for Mobile and Wireless Networks, Computational Methods for Knowledge Engineering, Logic Based Methods for Decision Making and Data Mining and Nonlinear Systems and Applications, respectively. All chapters in the*

*book discuss theoretical and practical issues connected with computational methods and optimization methods for knowledge engineering. The editors hope that this volume can be useful for graduate and Ph.D. students and researchers in Computer Science and Applied Mathematics. It is the hope of the editors that readers of this volume can find many inspiring ideas and use them to their research. Many such challenges are suggested by particular approaches and models presented in individual chapters of this book.*

*Create a fully operating application and deploy it to major mobile platforms using Xamarin.Forms About This Book Create standard user interfaces on Windows Mobile, Android, and iOS and then make those interfaces look good with ease Design a full-blown application in very little time with just about the entire code being shared Learn how to access platform-specific features and still have the same core code with this handy guide Who This Book Is For This book is intended for mobile software developers who are fed up with having three different code sets for the same application. If you want to put your code on all mobile platforms with minimum fuss, and just want to develop but haven't got the time to be digging too far into a particular platform, this is the book for you. Basic knowledge of C# is assumed. What You Will Learn Create a responsive UI, modified to suit the target platform Understand the basics of designing an application, and the considerations needed for target platforms Construct a complete app using a single codebase Develop attractive user interfaces Bind information to the code behind to generate a reactive application Design an effective portable class library (PCL) Include a Windows Mobile application within your standard Xamarin.Forms application Extend your applications using the Xamarin.Forms Labs library In Detail Xamarin is an IDE used for the development of native iOS, Android, and Windows, and cross-platform mobile applications in C#. For the mobile developer, that means learning three different languages to create the same application. Even if you use the Xamarin toolchain, you still need to work with three different user interface construction sets. Xamarin is essentially a container in which developers can write any application in C# and use the Xamarin compiler to package and deploy on Android, iOS, or Windows platforms. To top this, Xamarin.Forms plays the role of a single codebase for mobile applications. This book will show you, with fully-coded examples, how to use both the Xamarin toolchain and the Xamarin.Forms library to code once for the three platforms. It goes from the concept and design of a mobile messenger application to its execution. You will be introduced to Messenger—the messaging app—which includes key features such as push notifications, UI, maps, databases, and web*

*services. Next, you will learn to plan the UI using Xamarin.Forms for cross-mobile platform development, and move on to creating custom buttons, extending the UI, and connecting to social sites such as Facebook and Twitter. You will also learn about the limitations of PCL libraries and how they make coding easier. This will be followed by the creation of a SQLite database and a database manager, and the SQLite database's reflection within the database manager. You will then be taken through the use of hardware features with ample coverage of iOS, Android, and Windows Mobile. Finally, the book will conclude by introducing common strategies that allow you to create applications that "just work" without having to reinvent the wheel each time. Style and approach A fun and informal approach to creating a mobile application using the most up-to-date cross-platform approach. Each coding chapter includes fully working code examples available for download from the Packt Publishing website.*

*Este libro ha sido escrito con el fin que sea de utilidad para personas que se dedican al desarrollo de software o aquellos que apenas se inician en esta actividad. Los capítulos se han estructurado de tal manera que el aprendizaje incluya aspectos teóricos como prácticos. La teoría se ha explicado de forma clara y concisa y los ejercicios se basaron en estos conceptos. Al final, se incluye un ejemplo integrador donde todos los conceptos son considerados.*

*Master the skills required to develop cross-platform applications from drawing board to app store(s) using Xamarin About This Book Learn to deliver high-performance native apps that leverage platform specific acceleration, complied for native performance Learn development techniques that will allow you to use and create custom layouts for cross-platform UI Gain the knowledge needed to become more efficient in testing, deploying, and monitoring your applications Implement application life cycle management concepts to manage cross-platform projects Who This Book Is For Mobile application developers wanting to develop skills required to steer cross-platform applications using Xamarin. What You Will Learn Share C# code across platforms and call native Objective-C or Java libraries from C# Submit your app to the Apple App Store and Google Play Use the out-of-the-box services to support third-party libraries Find out how to get feedback while your application is used by your users Create shared data access using a local SQLite database and a REST service Test and monitor your applications Gain memory management skills to avoid memory leaks and premature code cycles while decreasing the memory print of your applications Integrate network resources with cross-platform applications Design and implement eye-catching and reusable UI components without compromising on nativity in mobile*

*applications In Detail Developing a mobile application for just one platform is becoming a thing of the past. Companies expect their apps to be supported on iOS, Android and Windows Phone, while leveraging the best native features on all three platforms. Xamarin's tools help ease this problem by giving developers a single toolset to target all three platforms. The main goal of this course is to equip you with knowledge to successfully analyze, develop, and manage Xamarin cross-platform projects using the most efficient, robust, and scalable implementation patterns. Module 1 is a step-by-step guide to building real-world applications for iOS and Android. The module walks you through building a chat application, complete with a backend web service and native features such as GPS location, camera, and push notifications. Additionally, you'll learn how to use external libraries with Xamarin and Xamarin.Forms. Module 2 provide you recipes on how to create an architecture that will be maintainable, extendable, use Xamarin.Forms plugins to boost productivity. We start with a simple creation of a Xamarin.Forms solution, customize the style and behavior of views for each platform. Further on, we demonstrate the power of architecting a cross-platform solution. Next, you will utilize and access hardware features that vary from platform to platform with cross-platform techniques. You will master the steps of getting the app ready and publishing it in the app store. The last module starts with general topics such as memory management, asynchronous programming, local storage, networking, and platform-specific features. You will learn about key tools to leverage the pattern and advanced implementation strategies. Finally, we show you the toolset for application lifecycle management to help you prepare the development pipeline to manage and see cross-platform projects through to public or private release. After the completion of this course, you will learn a path that will get you up and running with developing cross-platform mobile applications and help you become the go-to person when it comes to Xamarin. Style and approach This course will serve as comprehensive guide for developing cross-platform applications with Xamarin with a unique approach that will engage you like never before as you create real-world cross-platform apps on your own.*
*Computational Science and Its Applications - ICCSA 2020*
*Creating native cross-platform mobile apps*
*Flutter for Beginners*
*Evolved Code Editing for Windows, macOS, and Linux*
*Professional Mobile Application Development*

*C# 9 and .NET 5 - Modern Cross-Platform Development - Fifth Edition*
*Mobile DevOps*
Now in its 8th edition, Pro ASP.NET Core has been thoroughly updated for ASP.NET Core 3 and online for ASP.NET Core 5 and .NET 5.0. This comprehensive, full-color guide is the only book you need to learn ASP.NET Core development. Professional developers get ready to produce leaner applications for the ASP.NET Core platform. This edition puts ASP.NET Core 3 into context, and takes a deep dive into the tools and techniques required to build modern, extensible web applications. New features and capabilities such as MVC 3, Razor Pages, Blazor Server, and Blazor WebAssembly are covered, along with demonstrations of how they can be applied in practice. Following the same popular format and style found in previous editions, author Adam Freeman explains how to get the most out of ASP.NET Core 3. Starting with the nuts-and-bolts topics, he teaches readers about middleware components, built-in services, request model binding, and more. Moving along, he introduces increasingly more complex topics and advanced features, including endpoint routing and dependency injection. Written for professionals wanting to incorporate the latest functionality of ASP.NET Core 3 into their projects, this book also serves as a complete reference on ASP.NET Core. Beginners with some background in Microsoft web development will also greatly benefit from the in-depth coverage provided throughout. What You Will Learn: Build a solid foundation and skill set for working with the entire ASP.NET Core platformApply ASP.NET Core 3 and ASP.NET Core 5 features in your developer environment; plentiful reusable templatesSee how to create RESTful web services, web applications, and client-side applicationsLeverage existing knowledge to efficiently get up and running with new programming models Adam Freeman is an experienced IT professional who has held senior positions in a range of companies, most recently serving as chief technology officer and chief operating officer of a global bank. Now retired, he spends his time writing and long-distance running. "The Rolls-Royce of ASP.NET books, (or if you're American, the Cadillac). Very thorough!" Les Jackson, MCSD, DotNet Playbook "The author's instruction is direct, easy to understand and supplemented with clear code examples... Whether you are a beginner learning ASP.NET Core 3.1 app development, or an

experienced professional ready to master advanced concepts, I consider this book a 'must have' for you!" Jeremy Likness, Senior Program Manager, Microsoft "...the best single resource for teaching MVC web apps using ASP.NET. " Charles Carter, MSCS, MSwE, JD, Cloud Application Development Instructor, Microsoft Software and Systems Academy Create applications for all major smartphone platforms Creating applications for the myriad versions and varieties of mobile phone platforms on the market can be daunting to even the most seasoned developer. This authoritative guide is written in such as way that it takes your existing skills and experience and uses that background as a solid foundation for developing applications that cross over between platforms, thereby freeing you from having to learn a new platform from scratch each time. Concise explanations walk you through the tools and patterns for developing for all the mobile platforms while detailed steps walk you through setting up your development environment for each platform. Covers all the major options from native development to web application development Discusses major third party platform development acceleration tools, such as Appcelerator and PhoneGap Zeroes in on topics such as developing applications for Android, IOS, Windows Phone 7, and Blackberry Professional Mobile Cross Platform Development shows you how to best exploit the growth in mobile platforms, with a minimum of hassle.

Use Visual Studio Code to write and debug code quickly and efficiently on any platform, for any device, using any programming language, and on the operating system of your choice. Visual Studio Code is an open source and cross-platform development tool that focuses on code editing across a variety of development scenarios, including web, mobile, and cloud development. This second edition of Visual Studio Code Distilled has been updated and expanded with two new chapters on writing apps with Python and building apps for the cloud and deployment to Azure. The book teaches you how to be immediately productive with Visual Studio Code, from the basics to some of the more complex topics. You will learn how to work on individual code files, complete projects, and come away with an understanding of advanced code-editing features that will help you focus on productivity, and source code collaboration with Git. What You Will Learn Get started

with practical guidance on Visual Studio Code, including expansive guidance on writing apps with C# and Python Comprehend Visual Studio Code in a way that is not just theory or a list of features, but an approach driven by developer tasks and needs Understand integrated support for team collaboration with Git for executing and debugging code, and the many ways you can extend and customize Visual Studio Code Debug code on multiple platforms through real-world guidance, such as working under corporate networks Expand your coding intelligence from web to mobile to the cloud Acquire valuable tips, tricks, and suggestions from hard-earned, real-world experience to be more productive Who This Book Is For All developers (including JavaScript, Java, NodeJS), not just those with a Microsoft background, who will benefit from learning and using VS code as a cross-platform and cross-language tool

C# 7.1 and .NET Core 2.0 – Modern Cross-Platform Development, Third Edition is a practical guide to creating powerful cross-platform applications with C# 7 and .NET Core 2.0.About This Book* Build modern, cross-platform applications with .NET Core 2.0* Get up to speed with C#, and up to date with all the latest features of C# 7.1* Start creating professional web applications with ASP.NET Core 2.0Who This Book Is ForThis book is targeted towards readers who have some prior programming experience or have a science, technology, engineering, or mathematics (STEM) background, and want to gain a solid foundation with C# and to be introduced to the types of applications they could build and will work cross-platform on Windows, Linux, and macOS.What You Will Learn* Build cross-platform applications using C# 7.1 and .NET Core 2.0* Explore ASP.NET Core 2.0 and learn how to create professional websites, services, and applications* Improve your application's performance using multitasking* Use Entity Framework Core and LINQ to query and manipulate data* Master object-oriented programming with C# to increase code reuse and efficiency* Familiarize yourself with cross-device app development using the Universal Windows Platform* Protect and manage your files and data with encryption, streams, and serialization* Get started with mobile app development using Xamarin.Forms* Preview the nullable reference type feature of C# 8In DetailC# 7.1 and .NET Core 2.0 – Modern Cross-Platform Development, Third Edition, is a practical guide to creating

powerful cross-platform applications with C# 7.1 and .NET Core 2.0. It gives readers of any experience level a solid foundation in C# and .NET. The first part of the book runs you through the basics of C#, as well as debugging functions and object-oriented programming, before taking a quick tour through the latest features of C# 7.1 such as default literals, tuples, inferred tuple names, pattern matching, out variables, and more.After quickly taking you through C# and how .NET works, this book dives into the .NET Standard 2.0 class libraries, covering topics such as packaging and deploying your own libraries, and using common libraries for working with collections, performance, monitoring, serialization, files, databases, and encryption. The final section of the book demonstrates the major types of application that you can build and deploy cross-device and cross-platform. In this section, you'll learn about websites, web applications, web services, Universal Windows Platform (UWP) apps, and mobile apps. By the end of the book, you'll be armed with all the knowledge you need to build modern, cross-platform applications using C# and .NET.Style and approachThis book takes a step-by-step approach and is filled with exciting projects and fascinating theory. It uses three high-impact sections to equip you with all the tools you'll need to build modern, cross-platform applications using C# and .NET Core 2.0.

The practice of enterprise application development has benefited from the emergence of many new enabling technologies. Multi-tiered object-oriented platforms, such as Java and .NET, have become commonplace. These new tools and technologies are capable of building powerful applications, but they are not easily implemented. Common failures in enterprise applications often occur because their developers do not understand the architectural lessons that experienced object developers have learned. Patterns of Enterprise Application Architecture is written in direct response to the stiff challenges that face enterprise application developers. The author, noted object-oriented designer Martin Fowler, noticed that despite changes in technology--from Smalltalk to CORBA to Java to .NET--the same basic design ideas can be adapted and applied to solve common problems. With the help of an expert group of contributors, Martin distills over forty recurring solutions into patterns. The result is an indispensable handbook of solutions that are

applicable to any enterprise application platform. This book is actually two books in one. The first section is a short tutorial on developing enterprise applications, which you can read from start to finish to understand the scope of the book's lessons. The next section, the bulk of the book, is a detailed reference to the patterns themselves. Each pattern provides usage and implementation information, as well as detailed code examples in Java or C#. The entire book is also richly illustrated with UML diagrams to further explain the concepts. Armed with this book, you will have the knowledge necessary to make important architectural decisions about building an enterprise application and the proven patterns for use when building them. The topics covered include · Dividing an enterprise application into layers · The major approaches to organizing business logic · An in-depth treatment of mapping between objects and relational databases · Using Model-View-Controller to organize a Web presentation · Handling concurrency for data that spans multiple transactions · Designing distributed object interfaces

Desarrollo del Software con visual C# 2013 y Android

Xamarin Mobile Application Development for Android

Build multiplatform mobile apps and a game from scratch using C# and Visual Studio 2019, 2nd Edition

Using SQLite

Xamarin Mobile Application Development

Mastering Cross-Platform Development with Xamarin

Learning ASP.NET Core 2.0

Xamarin.Forms Projects is a project-based guide that enables you to build effective mobile applications from the ground up using seven real-world examples. Starting with simpler projects to help you get up and running with the framework, the book explores all the components of Xamarin.Forms and takes you through to building complex projects...

Learn how to build stunning, maintainable, cross-platform mobile application user interfaces using C# 7 with the power of both the Xamarin and Xamarin.Forms frameworks. Key Features Build effective native and cross-platform user interfaces using the Xamarin frameworks for iOS and Android, as well as Xamarin.Forms Maximize the testability, flexibility, and overall quality of your Xamarin mobile apps Step-by-Steps guide that is packed with real-world scenarios and solutions, to build professional grade mobile apps and games for the iOS and Android platforms, using C# 7 Book Description This book will provide you with the knowledge and practical skills that are required to develop real-world Xamarin and

Xamarin.Forms applications. You'll learn how to create native Android app that will interact with the device camera and photo gallery, and then create a native iOS sliding tiles game. You will learn how to implement complex UI layouts and create customizable control elements based on the platform, using XAML and C# 7 code to interact with control elements within your XAML ContentPages. You'll learn how to add location-based features by to your apps by creating a LocationService class and using the Xam.Plugin.Geolocator cross-platform library, that will be used to obtain the current device location. Next, you'll learn how to work with and implement animations and visual effects within your UI using the PlatformEffects API, using C# code. At the end of this book, you'll learn how to integrate Microsoft Azure App Services and use the Twitter APIs within your app. You will work with the Razor Templating Engine to build a book library HTML5 solution that will use a SQLite.net library to store, update, retrieve, and delete information within a local SQLite database. Finally, you will learn how to write unit tests using the NUnit and UITest frameworks. What you will learn Downloading and Installing the Visual Studio for Mac IDE Overview and Understanding of the Xamarin Mobile Platform Understand the MVVM architectural pattern and how to implement this with your apps Build a NavigationService class to enable navigation between your ViewModels Implement Data-Binding to control elements within your XAML pages and ViewModels Create and Implement Xamarin.Forms Animations within your applications Work with the Microsoft Azure App Services Platform and the Facebook SDK Who this book is for This book is intended for readers who have experience using at least the C# 6.0 programming language and interested in learning how to create stunning native, and cross-platform user interfaces for the iOS and Android platforms using the Xamarin and Xamarin.Forms frameworks using C# 7. Today's world is all about perfection, and there are hundreds of applications that are released each day out of which only a few succeed. Making sure that the app looks, performs, and behaves as expected is one of the biggest challenge developers face today.

A step-by-step guide to learning Flutter and Dart 2 for creating Android and iOS mobile applications Key FeaturesGet up to speed with the basics of Dart programming and delve into Flutter developmentUnderstand native SDK and third-party libraries for building Android and iOS applications using FlutterPackage and deploy your Flutter apps to achieve native-like performanceBook Description Google Flutter is a cross-platform mobile framework that makes it easy to write high-performance apps for Android and iOS. This book will help you get to grips with the basics of the Flutter framework and the Dart programming language. Starting from setting up your development environment, you'll learn to design the UI and add user input functions. You'll explore the navigator widget to manage app routes and learn to add transitions between screens. The book will even guide you through developing your own plugin and later, you'll discover how to structure good plugin code. Using the Google Places API, you'll also understand how to display a map in the app and add markers and interactions to it. You'll then learn to improve the user experience with features such as map integrations, platform-specific code with native languages, and personalized animation options for designing intuitive UIs. The book follows a practical approach and gives you access to all relevant code files hosted at github.com/PacktPublishing/Flutter-for-Beginners. This will help you access a variety of examples and prepare your own bug-free apps, ready to deploy on the App Store and Google Play Store. By the end of this book, you'll be well-versed with Dart programming and have the skills to develop your own mobile apps or build a career as a Dart and Flutter app developer. What you will learnUnderstand the fundamentals of the Dart programming languageExplore the core concepts of the Flutter UI and how it compiles for multiple platformsDevelop Flutter plugins and widgets and understand how to structure plugin code appropriatelyStyle your Android and iOS apps with widgets and learn the difference between stateful and stateless widgetsAdd animation to your UI using Flutter's AnimatedBuilder

componentIntegrate your native code into your Flutter codebase for native app performanceWho this book is for This book is for developers looking to learn Google's revolutionary framework Flutter from scratch. No prior knowledge of Flutter or Dart is required; however, basic knowledge of any programming language will be helpful.

Master the skills required to steer cross-platform applications from drawing board to app store(s) using Xamarin About This Book Develop your Xamarin development skills with this comprehensive guide on various patterns and features so you can create elegant and high-quality applications Create adaptive user interfaces on separate platforms without compromising the user experience and platform identity Implement application lifecycle management concepts to manage and finalize cross-platform projects and efficiently collaborate with others Who This Book Is For This book is ideal for those who want to take their entry–level Xamarin mobile development skills to the next level to become the go-to person within their organization. To fully understand the patterns and concepts described, you should possess a reasonable level of knowledge about the core elements of Xamarin and cross-platform application development with it. What You Will Learn Configure your environment for cross-platform projects with Xamarin Gain memory management skills to avoid memory leaks and premature code cycles while decreasing the memory print of your applications Employ asynchronous and parallel patterns to execute non-interactive and non-blocking processes Create and use SQLite databases for offline scenarios Integrate network resources with cross-platform applications Design and implement eye-catching and reusable UI components without compromising nativity in mobile applications Manage the application lifecycle of cross-platform development projects Distribute Xamarin applications through public or private channels In Detail The main goal of this book is to equip you with the required know-how to successfully analyze, develop, and manage Xamarin cross-platform projects using the most efficient, robust, and scalable implementation patterns. This book starts with general topics such as memory management, asynchronous programming, local storage, and networking, and later moves onto platform-specific features. During this transition, you will learn about key tools to leverage the patterns described, as well as advanced implementation strategies and features. The book also presents User Interface design and implementation concepts on Android and iOS platforms from a Xamarin and cross-platform perspective, with the goal to create a consistent but native UI experience. Finally, we show you the toolset for application lifecycle management to help you prepare the development pipeline to manage and see cross-platform projects through to public or private release. Style and approach This is a comprehensive guide on various Xamarin features and patterns. Each topic is explained and demonstrated with code samples, which are revised in each section in an iterative manner and analyzed with available diagnostic tools to demonstrate the benefits of different patterns.

Cross-platform UI Development with Xamarin.Forms

Build modern web apps with ASP.NET Core 2.0, MVC, and EF Core 2

Creating Mobile Apps with Xamarin.Forms Preview Edition 2

Fowler

Clean Architecture

¡Programe para escritorio, web y dispositivos móviles!

Developing Inclusive Mobile Apps

*Leverage ASP.Net Web API to build professional web services and create powerful applications. About This Book Get a comprehensive analysis of the*

*latest specification of ASP.NET Core and all the changes to the underlying platform that you need to know to make the most of the web API See an advanced coverage of ASP.NET Core Web API to create robust models for your data, create controllers, and handle routing and security This book is packed with key theoretical and practical concepts that can be instantly applied to build professional applications using API with Angular 4, Ionic, and React Who This Book Is For This book is for .Net developers who wants to Master ASP.NET Core (Web API) and have played around with previous ASP.NET Web API a little, but don't have in-depth knowledge of it. You need to know Visual Studio and C#, and have some HTML, CSS, and JavaScript knowledge. What You Will Learn Acquire conceptual and hands-on knowledge of ASP.NET Core (MVC & Web API) Learn about HTTP methods, the structure of HTTP content, internet media types, and how servers respond to HTTP requests and their associated HTTP codes Explore middleware, filters, routing, and unit testing Optimize Web API implementations Develop a secure Web API interface Deploy Web API projects to various platforms Consume your web API in front end application based on Angular 4, Bootstrap, and Ionic Implement and explore the current trends in service architecture In Detail Microsoft has unified their main web development platforms. This unification will help develop web applications using various pieces of the ASP.NET platform that can be deployed on both Windows and LINUX. With ASP.NET Core (Web API), it will become easier than ever to build secure HTTP services that can be used from any client. Mastering ASP.NET Web API starts with the building blocks of the ASP.NET Core, then gradually moves on to implementing various HTTP routing strategies in the Web API. We then focus on the key components of building applications that employ the Web API, such as Kestrel, Middleware, Filters, Logging, Security, and Entity Framework.Readers will be introduced to take the TDD approach to write test cases along with the new Visual Studio 2017 live unit testing feature. They will also be introduced to integrate with the database using ORMs. Finally, we explore how the Web API can be consumed in a browser as well as by mobile applications by utilizing Angular 4, Ionic and ReactJS. By the end of this book, you will be able to apply best practices to develop complex Web API, consume them in frontend applications and deploy these applications to a modern hosting infrastructure. Style and approach Using a hands-on approach, we cover both the conceptual as well as the technical aspects of the ASP.NET Core (Web API) framework.*

*Skip the basics and delve right into Visual Studio 2017 advanced features and tools Professional Visual Studio 2017 is the industry-favorite guide to getting the most out of Microsoft's primary programming technology. From touring the new UI to exploiting advanced functionality, this book is designed to help professional developers become more productive. A unique IDE-centric approach provides a clear path through the typical workflow while exploring the nooks and crannies that can make your job easier. Visual Studio 2017 includes a host of features aimed at improving developer productivity and UI, and this book covers them all with clear explanation, new figures, and expert insight. Whether you're new to VS or just upgrading, this all-inclusive guide is an essential resource to keep within arm's reach. Visual Studio 2017 fixes the crucial issues that kept professionals from adopting VS 2015, and includes new features and tools that streamline the developer's job. This book provides the straightforward answers you need so you can get up to speed quickly and get back to work. Master the core functionality of Visual Studio 2017 Dig into the tools that make writing code easier Tailor the environment to your workflow, not the other way around Work your way through configuration, debugging, building, deployment, customizing, and more Microsoft is changing their release cadence—it's only been about two years since the last release—so developers need to quickly get a handle on new tools and features if they hope to remain productive. The 2017 release is designed specifically to help you get more done, in less time, with greater accuracy and attention to detail. If you're ready to get acquainted, Professional Visual Studio 2017 is your ideal guide.*

*This second Preview Edition ebook, now with 16 chapters, is about writing applications for Xamarin.Forms, the new mobile development platform for iOS, Android, and Windows phones unveiled by Xamarin in May 2014. Xamarin.Forms lets you write shared user-interface code in C# and XAML that maps to native controls on these three platforms.*

*The inclusion of experts in communicability in the software industry has allowed timeframes to speed up in the commercialization of new technological products worldwide. However, this constant evolution of software in the face of the hardware revolution opens up a host of new horizons to maintain and increase the quality of the interactive systems following a set of standardized norms and rules for the production of interactive software. Currently, we see some efforts towards this goal, but they are still partial solutions, incomplete, and flawed from the theoretical as well as practical points of view. If the quality of the interactive design is analyzed, it is left to professionals to generate systems that are efficient, reliable, user-friendly, and cutting-edge. The Handbook of Research on Software Quality Innovation in Interactive Systems analyzes the quality of the software applied to the interactive systems and considers the constant advances in the software industry. This book reviews the past and present of information and communication technologies with a projection towards the future, along with analyses of software, software design, phrases to use, and the purposes for software applications in interactive systems. This book is ideal for students, professors, researchers, programmers, analysists of systems, computer engineers, interactive designers, managers of software quality, and evaluators of interactive systems.*

*This book is where your adventures with Bluetooth LE begin. You'll start your journey by getting familiar with your hardware options: Arduino, BLE modules, computers (including Raspberry Pi!), and mobile phones. From there, you'll write code and wire circuits to connect off-the-shelf sensors, and even go all the way to writing your own Bluetooth Services. Along the way you'll look at lightbulbs, locks, and Apple's iBeacon technology, as well as get an understanding of Bluetooth security-- both how to beat other people's security, and how to make your hardware secure.*

*Understanding Game Application Development*

*Xamarin.Forms Projects*

*With Xamarin.Forms and ASP.NET*

*Pattern Enterpr Applica Arch*

*Cross Platform Mobile Development*

*Development of a mobile application for carpooling the elderly*

*Xamarin in Action*

**Bachelor Thesis from the year 2019 in the subject Computer Science - Applied, , language: English, abstract: This thesis proposes a platform to help improve elder's mobility through carpooling, a way for car drivers to share their private vehicle with more elders in order to splitting and reducing costs. Carpooling may be one of the best solutions when there is no other mean of transportation to a specific location but naturally it is not the only one. Mobile applications take more and more part of everyone's lives, different services for carpooling with different features begin to compete with existing transportation solutions. Some people start to prefer using new carpooling services over the traditional services represented by taxi services. GoRide aims to promote carpooling by targeting elders making it easier for them to adhere and use this system. In general, people have a hard time conciliating their schedules because of the way they move from one location to another. And elders suffer from this the**

most especially here in Algeria since transportation between cities is not that great, As students, we think there should exist more suitable transportation solutions to places where transportation networks are short and cheap and helpful for elders. By targeting elders people will more likely join the service since its users are primarily other people form the same environment. To put the carpooling system in place, we have designed and developed an Android mobile application with backend servers for users to access the carpooling service through their smartphones, additionally the application involves some features that are critical to the service. By using Android Development Tools and Libraries and efficient backend solutions we have managed to make the application simple but powerful as well, which makes this application very useful for the young and the old to use. Our app GoRide will be a unique carpooling application that would take benefits of the advantages of carpooling and try to improve and eliminate the disadvantages, all while focusing on making it a good carpooling experience for elders. The realization of our project will go through the conceptual phase and then development phase. Since making a good application requires good planning first.

Summary Xamarin in Action teaches you to build cross-platform mobile apps using Xamarin and C#. You'll explore all the layers of a Xamarin app, from design to deployment. By the end, you'll be able to build a quality, production-ready Xamarin app on iOS and Android from scratch with a high level of code reuse. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Rewriting the same app for iOS and Android is tedious, error-prone, and expensive. Microsoft's Xamarin drastically reduces dev time by reusing most application code—typically 70% or more. The core of your iOS and Android app is shared; you write platform-specific code only for the UI layer. And because Xamarin uses C#, your apps benefit from everything this modern language and the .NET ecosystem have to offer. About the Book Xamarin in Action teaches you to build cross-platform mobile apps using Xamarin and C#. You'll explore all the layers of a Xamarin app, from design to deployment. Xamarin expert Jim Bennett teaches you design practices that maximize code reuse and isolate device-specific code, making it a snap to incorporate the unique features of each OS. What's Inside Understanding MVVM to maximize code reuse

and testability Creating cross-platform model and UI logic layers Building device-specific UIs Unit and automated UI testing Preparing apps for publication with user tracking and crash analytics About the Reader Readers should have some experience with C#. Mobile development experience is helpful, but not assumed. About the Author Jim Bennett is a Xamarin MYP, Microsoft MVP, and Senior Cloud Developer Advocate at Microsoft, specializing in Xamarin mobile apps. He's a frequent speaker at events all around the world, including Xamarin user groups and Xamarin and Microsoft conferences. He regularly blogs about Xamarin development at https://jimbobbennett.io. Table of Contents PART 1 - GETTING STARTED WITH XAMARIN Introducing native cross-platform applications with Xamarin Hello MVVM—creating a simple cross-platform app using MVVM MVVM—the model-view–view model design pattern Hello again, MVVM—understanding and enhancing our simple MVVM app What are we (a)waiting for? An introduction to multithreading for Xamarin apps PART 2 - BUILDING APPS Designing MVVM cross-platform apps Building cross-platform models Building cross-platform view models Building simple Android views Building more advanced Android views Building simple iOS views Building more advanced iOS views PART 3 - FROM WORKING CODE TO THE STORE Running mobile apps on physical devices Testing mobile apps using Xamarin UITest Using App Center to build, test, and monitor apps Deploying apps to beta testers and the stores

The seven volumes LNCS 12249-12255 constitute the refereed proceedings of the 20th International Conference on Computational Science and Its Applications, ICCSA 2020, held in Cagliari, Italy, in July 2020. Due to COVID-19 pandemic the conference was organized in an online event. Computational Science is the main pillar of most of the present research, industrial and commercial applications, and plays a unique role in exploiting ICT innovative technologies. The 466 full papers and 32 short papers presented were carefully reviewed and selected from 1450 submissions. Apart from the general track, ICCSA 2020 also include 52 workshops, in various areas of computational sciences, ranging from computational science technologies, to specific areas of computational sciences, such as software engineering, security, machine learning and artificial intelligence, blockchain technologies, and of applications in many fields.

**Learn how to build web applications efficiently using ASP.NET Core 5 with the C# programming language and related frameworks Key FeaturesBuild web apps and services and cross-platform applications using .NET and C#Understand different web programming concepts with the help of real-world examplesExplore the new features and APIs in ASP.NET Core 5, EF Core, Visual Studio, and BlazorBook Description ASP.NET Core 5 for Beginners is a comprehensive introduction for those who are new to the framework. This condensed guide takes a practical and engaging approach to cover everything that you need to know to start using ASP.NET Core for building cloud-ready, modern web applications. The book starts with a brief introduction to the ASP.NET Core framework and highlights the new features in its latest release, ASP.NET Core 5. It then covers the improvements in cross-platform support, the view engines that will help you to understand web development, and the new frontend technologies available with Blazor for building interactive web UIs. As you advance, you'll learn the fundamentals of the different frameworks and capabilities that ship with ASP.NET Core. You'll also get to grips with securing web apps with identity implementation, unit testing, and the latest in containers and cloud-native to deploy them to AWS and Microsoft Azure. Throughout the book, you'll find clear and concise code samples that illustrate each concept along with the strategies and techniques that will help to develop scalable and robust web apps. By the end of this book, you'll have learned how to leverage ASP.NET Core 5 to build and deploy dynamic websites and services in a variety of real-world scenarios. What you will learnExplore the new features and APIs introduced in ASP.NET Core 5 and BlazorPut basic ASP.NET Core 5 concepts into practice with the help of clear and simple samplesWork with Entity Framework Core and its different workflows to implement your application's data accessDiscover the different web frameworks that ASP.NET Core 5 offers for building web appsGet to grips with the basics of building RESTful web APIs to work with real dataDeploy your web apps in AWS, Azure, and Docker containersWork with SignalR to add real-time notifications to your appWho this book is for This book is for developers who want to learn how to develop web-based applications using the ASP.NET Core framework. Familiarity with the C# language and a basic understanding of HTML and CSS is required to get the most out of this book.**

**Xamarin: Cross-Platform Mobile Application DevelopmentPackt Publishing Ltd**
**Build seven real-world cross-platform mobile apps with C# and Xamarin.Forms**
**iOS Development with Xamarin Cookbook**
**Xamarin Cross-platform Application Development - Second Edition**
**Azure and Xamarin Forms**
**Professional Visual Studio 2017**
**20th International Conference, Cagliari, Italy, July 1–4, 2020, Proceedings, Part VI**
**Mastering ASP.NET Web API**

*A comprehensive guide for beginners to learn the key concepts, real-world applications, and latest features of C# 9 and .NET 5 with hands-on exercises using VS Code Key Features: Explore the newest additions to C# 9, the .NET 5 class library, Entity Framework Core and Blazor Strengthen your command of ASP.NET Core 5.0 and create professional websites and services Build cross-platform apps for Windows, macOS, Linux, iOS, and Android Book description In C# 9 and .NET 5 - Modern Cross-Platform Development, Fifth Edition, expert teacher Mark J. Price gives you everything you need to start programming C# applications. This latest edition uses the popular Visual Studio Code editor to work across all major operating systems. It is fully updated and expanded with a new chapter on the Microsoft Blazor framework. The book's first part teaches the fundamentals of C#, including object-oriented programming and new C# 9 features such as top-level programs, target-typed new object instantiation, and immutable types using the record keyword. Part 2 covers the .NET APIs, for performing tasks like managing and querying data, monitoring and improving performance, and working with the file system, async streams, serialization, and encryption. Part 3 provides examples of cross-platform apps you can build and deploy, such as websites and services using ASP.NET Core or mobile apps using Xamarin.Forms. By the end of the book, you will have acquired the understanding and skills you need to use C# 9 and .NET 5 to create websites, services, and mobile apps. What you will learn Build your own types with object-oriented programming Query and manipulate data using LINQ Build websites and services using ASP.NET Core 5 Create intelligent apps using machine learning Use Entity Framework Core and work with relational databases Discover Windows app development using the Universal Windows Platform and XAML Build rich web experiences using the Blazor framework Build mobile applications for iOS and Android using Xamarin.Forms Who this book is for This book is best for C# and .NET beginners, or programmers who have worked with C# in the past but feel left behind by the changes in the past few years. This book doesn't expect you to have any C# or .NET experience; however, you should have a general understanding of programming. Students and professionals with a science, technology, engineering, or mathematics (STEM) background can certainly benefit from this book.*

*New edition of the bestselling guide to building an effective mobile app architecture with Xamarin.Forms 4 that maximizes the overall quality of apps. Key Features Updated for Xamarin.Forms 4 Packed with real-world scenarios and solutions to help you build professional grade mobile apps with Xamarin.Forms Includes design patterns and best practice techniques that every mobile developer should know Book Description Discover how to extend and build upon the components of the most recent version of Xamarin.Forms to develop an effective, robust mobile app architecture. This new edition features Xamarin.Forms 4 updates, including CollectionView and RefreshView, new coverage of client-side validation, and updates on how to implement user authentication. Mastering Xamarin.Forms, Third Edition is one of the few Xamarin books structured around the development of a simple app from start to finish, beginning with a basic Xamarin.Forms app and going step by step through several advanced topics to create a solution architecture rich with the benefits of good design patterns and best practices. This book introduces a core separation between the app's user interface and the app's business logic by applying the MVVM pattern and data binding, and then focuses on building a layer of plugin-like services that handle platform-specific utilities such as navigation and geo-location, as well as how to loosely use these services in the app with inversion of control and dependency injection. You'll connect the app to a live web-based API and set up offline synchronization before testing the app logic through unit testing. Finally, you will learn how to add monitoring to your Xamarin.Forms projects to track crashes and analytics and gain a proactive edge on quality. What you will learn Find out how, when, and why to use architecture patterns and best practices with Xamarin.Forms Implement the Model-View-ViewModel (MVVM) pattern and data binding in Xamarin.Forms mobile apps Incorporate client-side validation in Xamarin.Forms mobile apps Extend the Xamarin.Forms navigation API with a custom ViewModel-centric navigation service Leverage the inversion of control and dependency injection patterns in Xamarin.Forms mobile apps Work with online and offline data in Xamarin.Forms mobile apps Use platform-specific APIs to build rich custom user interfaces in Xamarin.Forms mobile apps Explore how to monitor mobile app quality using Visual Studio App Center Who this book is for This book is intended for .NET developers who are familiar with Xamarin mobile application development and the open source Xamarin.Forms toolkit. If you have already started working with Xamarin.Forms and want to take your app to the next level, making it more maintainable, testable and flexible, then this book is for you.*

*A mobile applications development masterclass for .NET and C# developers Key FeaturesUncover the new features and capabilities of the .NET 5 framework in this updated and improved second editionOptimize the time required to develop highly performant cross-platform applicationsUnderstand the architectural patterns and best practices for mobile application developmentBook Description Are you a .NET developer who wishes to develop mobile solutions without delving into the complexities of a mobile development platform? If so, this book is a perfect solution to help you build professional mobile apps without leaving the .NET ecosystem. Mobile Development with .NET will show you how to*

*design, architect, and develop robust mobile applications for multiple platforms, including iOS, Android, and UWP using Xamarin, .NET Core, and Azure. With the help of real-world scenarios, you'll explore different phases of application development using Xamarin, from environment setup, design, and architecture to publishing. Throughout the book, you'll learn how to develop mobile apps using Xamarin and .NET Standard. You'll even be able to implement a web-based backend composed of microservices with .NET Core using various Azure services including, but not limited to, Azure Active Directory, Azure Functions. As you advance, you'll create data stores using popular database technologies such as Cosmos DB and data models such as the relational model and NoSQL. By the end of this mobile application development book, you'll be able to create cross-platform mobile applications that can be deployed as cloud-based PaaS and SaaS. What you will learnDiscover the latest features of .NET 5 that can be used in mobile application developmentExplore Xamarin.Forms Shell for building cross-platform mobile UIsUnderstand the technical design requirements of a consumer mobile appGet to grips with advanced mobile development concepts such as app data management, push notifications, and graph APIsManage app data with Entity Framework CoreUse Microsoft's Project Rome for creating cross-device experiences with XamarinBecome well-versed with implementing machine learning in your mobile appsWho this book is for This book is for ASP.NET Core developers who want to get started with mobile development using Xamarin and other Microsoft technologies. Working knowledge of C# programming is necessary to get started.*

*This book discusses several exciting research topics and applications in the intelligent Heterogenous Networks (Het-Net) and Internet of Things (IoT) era. We are resolving significant issues towards realizing the future vision of the Artificial Intelligence (AI) in IoT-enabled spaces. Such AI-powered IoT solutions will be employed in satisfying critical conditions towards further advances in our daily smart life. This book overviews the associated issues and proposes the most up to date alternatives. The objective is to pave the way for AI-powered IoT-enabled spaces in the next generation Het-Net technologies and open the door for further innovations. The book presents the latest advances and research into heterogeneous networks in critical IoT applications. It discusses the most important problems, challenges, and issues that arise when designing real-time intelligent heterogeneous networks for diverse scenarios.*

*When you have questions about C# 7.0 or the .NET CLR and its core Framework assemblies, this bestselling guide has the answers you need. Since its debut in 2000, C# has become a language of unusual flexibility and breadth, but its continual growth means there's always more to learn. Organized around concepts and use cases, this updated edition provides intermediate and advanced programmers with a concise map of C# and .NET knowledge. Dive in and discover why this Nutshell guide is considered the definitive reference on C#. Get up to speed on the C# language, from the basics of syntax and variables to advanced topics such as pointers, operator overloading, and dynamic binding Dig deep into LINQ via three chapters dedicated to the topic Explore concurrency and asynchrony, advanced threading, and parallel*

*programming Work with .NET features, including XML, regular expressions, networking, serialization, reflection, application domains, and security Delve into Roslyn, the modular C# 7.0 compiler-as-a-service*
*Handbook of Research on Software Quality Innovation in Interactive Systems*
*Build cross-platform mobile applications with Xamarin.Forms 5 and ASP.NET Core 5, 2nd Edition*
*Build Intelligent Apps, Websites, and Services with Blazor, ASP.NET Core, and Entity Framework Core Using Visual Studio Code*
*C# 7.0 in a Nutshell*
*Build robust and a maintainable cross-platform mobile UI with Xamarin and C# 7, 2nd Edition*
*App architecture techniques for building multi-platform, native mobile apps with Xamarin.Forms 4, 3rd Edition*
*The Definitive Reference*

Learn to build a simple data-driven mobile game application using the power of Xamarin.Forms, ASP.NET, the Web API, and SignalR with this short book. In it you will build a cross-platform mobile application that targets both iOS and Android, connect your app with your database using Entity Framework, and implement real-time syncing functionality using SignalR. Understanding Game Application Development starts by giving you an overview of the development tools, an installation guide, and a list of prerequisites. You will learn how to manage application flow, create your workspace, and set up your database. Next, you will see how to access data for handling CRUD operations and define the necessary API endpoints. Further, you will build a mobile application with Xamarin.Forms, both in iOS and in Android. You will also understand the deployment and testing process as well as how to build a real-time leader board using ASP.NET MVC and SignalR. Finally, you will understand how to publish your source code on GitHub from Visual Studio 2017. What You Will LearnUnderstand the basic concept and fundamentals of the technologies used for building the applicationsSet up your development environmentCreate a SQL database from scratch Implement a data access layerDefine REST service endpoints using the Web APIDeploy, test, and debug iOS and Android applicationsPush your source code to GitHubWho This Book Is For .NET developers who want to jump on mobile application development with Xamarin and learn with practical examples.

Develop, test, and deliver fully-featured Android applications using Xamarin About This Book Build and test multi-view Android applications using Xamarin.Android Work with device capabilities such as location sensors and the camera A progressive, hands-on guide to develop stunning Android applications using Xamarin Who This Book Is For If you are a C# developer who wants to develop Android apps and enhance your existing skill set, then this book is ideal for you. Good working knowledge of C#, .NET, and object-oriented software development is assumed. What You Will Learn Build

a multi-view, orientation-aware Android application with navigation Lay out content using the LinearLayout, RelativeLayout, and TableLayout layout managers Use a ListView (AdapterView) and Adapter to build a view that is populated from server data Consume REST web service to perform GET, UPDATE, DELETE operation Use Android SQLite for data persistence and caching Capture the current location of a device, determine the street address, and integrate with the map app Test, debug, and deploy an Android app In Detail Technology trends come and go, but few have generated the excitement, momentum, or long-term impact that mobile computing has. Mobile computing impacts people's lives at work and at home on a daily basis. Many companies and individual developers are looking to become a part of the movement but are unsure how to best utilize their existing skills and assets. The Xamarin suite of products provides new opportunities to those who already have a significant investment in C# development skills and .NET code bases, and would like to enter into this new, exciting world. This example-oriented guide provides a practical approach to quickly learn the fundamentals of Android app development using C# and Xamarin.Android. It will lead you through building an Android app step-by-step with steadily increasing complexity. Beginning with an overview of the Android and Xamarin platforms to provide you with a solid understanding of the underlying platform, we gradually walk through building and testing a Points of Interest Android app using C# and the Xamarin.Android product. You will learn to create ListView and add detail view to your Android application. You will handle application behaviors on orientation changes, before learning the different techniques to manage resources and layouts to support multiple screen sizes. You will then access a SQLite database in a cross-platform way and add location features to your application. Finally, you will add camera integration to your application and deploy your app to the various Android app stores. Style and approach An example-oriented, comprehensive guide to gain an understanding of both the Android and Xamarin platforms.

If you are a developer with experience in C# and are just getting into mobile development, this is the book for you. If you have experience with desktop applications or the Web, this book will give you a head start on cross-platform development.

Application developers, take note: databases aren't just for the IS group any more. Whether you're developing applications for the desktop, the Web, embedded systems, or operating systems, the SQLite database provides an alternative to heavy-duty client-server databases such as Oracle and MySQL. With this book, you'll get complete guidance for using this small and lightweight database effectively. You'll learn how to make SQLite an integral part of your application to help contain the size and complexity of your project. And you'll discover how much simpler it is to build database-backed applications with SQLite than the database tools you've been using. Get a crash course in data modeling Learn how to use SQLite with scripting languages such as Perl, Python, and Ruby Become familiar with the

subset of SQL supported by SQLite

Discover how to create cross platform apps for Android, iOS and UWP using Azure services and C# with Xamarin Forms. This book illustrates how to utilize Azure cloud storage for serving up Azure SQL DB data through Azure App Services. The book starts by setting up Xamarin and introducing Xamarin Forms and then covers the Azure Portal from a developer's perspective and goes on to demonstrate how to build an Azure Service using Quickstart. You'll also see how to add Azure support to Xamarin Forms application. You'll review in detail how to build a Xamarin Form with Azure Client and modify an existing app to become a Xamarin Forms Client for Azure with offline synchronization. You then move on to third-party controls that speed up development. By the end of the book, you will be able to use Azure and Xamarin together and master how to use Azure Mobile Quickstarts, Azure SQL plumbing, database synchronization and Xamarin Forms. What You'll Learn Create a Xamarin Forms App and understand the Structure of a Xamarin Forms App. Navigate pages and use platform specific coding. Use images, ListView and the Azure Mobile App Quickstart to build a Service and Xamarin Forms app Modify an existing app to use Azure Client Libraries, understand offline storage with SQLite and incorporate offline synchronization Who This Book Is For Software developers new to Xamarin and/or Azure and for the developers who are familiar with both the technologies to use in mobile apps.

Pro ASP.NET Core 3

A Craftsman's Guide to Software Structure and Design

ASP.NET Core 5 for Beginners

Learn Swift Programming and Build iPhone Apps with SwiftUI and Xcode 13 (English Edition)

Mastering Xamarin.Forms

Xamarin: Cross-Platform Mobile Application Development

Advanced Computational Methods for Knowledge Engineering

By failing to consider those with needs different to ourselves, we are telling these people they are not welcome in our app, and therefore that technology as a whole, is not for them. This is not hyperbole—23% of people in the US with a registered disability aren't online at all, that's three times more likely than the general population. When asked why they're not online, disabled respondents say their disability prevents them or that using the internet is too hard. To help your apps combat the issue of digital exclusion, this book covers considerations and tools mobile developers, or anyone creating mobile experiences, can use to make mobile work better for those with disabilities—mental or physical—and how to create a better experience for everyone. Software is not made up of cold, unthinking algorithms. Software is a craft in the truest sense of the word, and one of the greatest tools you can have as a craftsperson is empathy for the people who will be using your app. Each one of whom is an individual with different abilities, experiences, knowledge, and circumstances. What You'll Learn Create mobile experiences that work for as many people as possible Incorporate a worldview of

accessibility and customer service into your design Work with accessibility tools and techniques commonly available for developers Who This Book Is For Mobile developers working solo or as part of a team. UX designers, quality engineers, product owners, and anybody working in mobile.

Explore Xamarin.Forms to develop dynamic applications Key FeaturesExplore SQLite through Xamarin to store locations for various location-based applicationsMake a real-time serverless chat service by using Azure SignalR serviceBuild Augmented Reality application with the power of UrhoSharp together with ARKit and ARCore Book Description Xamarin.Forms is a lightweight cross-platform development toolkit for building applications with a rich user interface. In this book you'll start by building projects that explain the Xamarin.Forms ecosystem to get up and running with building cross-platform applications. We'll increase in difficulty throughout the projects, making you learn the nitty-gritty of Xamarin.Forms offerings. You'll gain insights into the architecture, how to arrange your app's design, where to begin developing, what pitfalls exist, and how to avoid them. The book contains seven real-world projects, to get you hands-on with building rich UIs and providing a truly cross-platform experience. It will also guide you on how to set up a machine for Xamarin app development. You'll build a simple to-do application that gets you going, then dive deep into building advanced apps such as messaging platform, games, and machine learning, to build a UI for an augmented reality project. By the end of the book, you'll be confident in building cross-platforms and fitting Xamarin.Forms toolkits in your app development. You'll be able to take the practice you get from this book to build applications that comply with your requirements. What you will learnSet up a machine for Xamarin developmentGet to know about MVVM and data bindings in Xamarin.FormsUnderstand how to use custom renderers to gain platform-specific accessDiscover Geolocation services through Xamarin EssentialsCreate an abstraction of ARKit and ARCore to expose as a single API for the game Learn how to train a model for imageclassification with Azure Cognitive ServicesWho this book is for This book is for mobile application developers who want to start building native mobile apps using the powerful Xamarin.Forms and C#. Working knowledge of C#, .NET, and Visual Studio is required.

The book is written in a recipe format with practical examples, allowing you to go directly to your topic of interest or follow topics throughout a chapter to gain an in-depth knowledge. There are also plenty of hints and best practices along the way. If you are a C#/.NET developer with no previous experience in iOS development or an Objective-C developer who wants to create complete iOS applications and deploy them to the App Store, then this book is ideal for you. No experience with Xamarin is needed.

Learn iOS App development with advanced Apple technology and developer-centric tools. KEY FEATURES Loaded with core developer tools, including SwiftUI, Xcode, and CoreML. Covers app architecture, design patterns, and mobile hardware use in app development. Numerous examples covering database, GPS, image recognition, and ML. DESCRIPTION This book is a step-by-step, hands-on guide for Apple developers to build iOS apps using Swift programming with minimal effort. This book will help develop the knowledge and skills necessary to program Apple applications independently. This book introduces you to Swift, SwiftUI, MapKit, Xcode, and Core ML and guides you through the process of creating a strong, marketable iOS application. The book begins with the fundamentals of Swift, which will serve as the foundation for future app development. This book will help readers to develop user interfaces for iOS applications, using SwiftUI and Interface Builder, as well as the code for views, view controllers, and data managers. The book teaches how to use Core Data and SQLite to store databases. It will help you work with Apple technologies and frameworks, including Core Location and MapKit for GPS tracking, Camera and Photo Library for image storage, Core ML for machine learning, and implementations of artificial intelligence solutions. By the end of this book, you will have developed a solid foundation for writing Swift apps, utilizing best practices in architecture, and publishing

them to the app store. The book successfully introduces you to the entire iOS application development journey in a manageable manner and instills an understanding of Apple apps. WHAT YOU WILL LEARN     Develop practical skills in Swift programming, Xcode, and SwiftUI. Learn to work around the database, file handling, and networking while building apps.     Utilize the capabilities of mobile hardware to include sound, images, and videos.     Bring machine learning capabilities using the Core ML framework.     Integrate features such as App Gestures and Core Location into iOS applications.     Utilize mobile design patterns and maintain a clean coding style. WHO THIS BOOK IS FOR This book is ideal for beginners in programming, students, and professionals interested in learning how to program in iOS, use various developer tools, and create Apple apps. Working knowledge of any programming language is an advantage but not required. TABLE OF CONTENTS 1. Getting Started with Xcode 2. Swift Fundamentals 3. Classes, Struct, and Enumerations 4. Protocols, Extensions, and Error Handling 5. TabBar, TableView, and CollectionView 6. User Interface Design with SwiftUI 7. Database with SQLite and Core Data 8. File Handling in iOS 9. App Gesture Recognizers in iOS 10. Core Location with MapKit 11. Camera And Photo Library 12. Machine Learning with Core ML 13. Networking in iOS Apps 14. Mobile App Patterns and Architectures 15. Publish iOS App on App Store

Xamarin Mobile Application Development is a hands-on Xamarin.Forms primer and a cross-platform reference for building native Android, iOS, and Windows Phone apps using C# and .NET. This book explains how to use Xamarin.Forms, Xamarin.Android, and Xamarin.iOS to build business apps for your customers and consumer apps for Google Play and the iTunes App Store. Learn how to leverage Xamarin.Forms for cross-platform development using the most common UI pages, layouts, views, controls, and design patterns. Combine these with platform-specific UI to craft a visually stunning and highly interactive mobile user experience. Use Xamarin.Forms to data bind your UI to both data models and to view models for a Model-View-ViewModel (MVVM) implementation. Use this book to answer the important question: Is Xamarin.Forms right for my project? Platform-specific UI is a key concept in cross-platform development, and Xamarin.Android and Xamarin.iOS are the foundation of the Xamarin platform. Xamarin Mobile Application Development will cover how to build an Android app using Xamarin.Android and an iOS app using Xamarin.iOS while sharing a core code library. SQLite is the database-of-choice for many Xamarin developers. This book will explain local data access techniques using SQLite.NET and ADO.NET. Build a mobile data access layer (DAL) using SQLite and weigh your options for web services and enterprise cloud data solutions. This book will show how organize your Xamarin code into a professional-grade application architecture. Explore solution-building techniques from starter-to-enterprise to help you decouple your functional layers, manage your platform-specific code, and share your cross-platform classes for code reuse, testability, and maintainability. Also included are 250+ screenshots on iOS, Android, and Windows Phone and 200+ C# code examples with downloadable C# and XAML versions available from Apress.com. This comprehensive recipe and reference book addresses one of the most important and vexing problems in the software industry today: How do we effectively design and develop cross-platform mobile applications?

iOS 15 Application Development for Beginners
Mobile Development with .NET
Applications, Challenges, and Scenarios in IoT HetNets
Make: Bluetooth
Cross-Platform C# and Xamarin.Forms Fundamentals
Real-Time Intelligence for Heterogeneous Networks

Mastering Xamarin UI Development

Learn how web applications can be built efficiently using ASP.NET Core 2.0 and related frameworks About This Book Get to grips with the new features and APIs introduced in ASP.NET Core 2.0 Leverage the MVC framework and Entity Framework Core 2 to build efficient applications Learn to deploy your web applications in new environments such as the cloud and Docker Who This Book Is For This book is for developers who would like to build modern web applications with ASP.NET Core 2.0. No prior knowledge of ASP.NET or .NET Core is required. However, basic programming knowledge is assumed. Additionally, previous Visual Studio experience will be helpful but is not required, since detailed instructions will guide through the samples of the book.This book can also help people, who work in infrastructure engineering and operations, to monitor and diagnose problems during the runtime of ASP.NET Core 2.0 web applications. What You Will Learn Set up your development environment using Visual Studio 2017 and Visual Studio Code Create a fully automated continuous delivery pipeline using Visual Studio Team Services Get to know the basic and advanced concepts of ASP.NET Core 2.0 with detailed examples Build an MVC web application and use Entity Framework Core 2 to access data Add Web APIs to your web applications using RPC, REST, and HATEOAS Authenticate and authorize users with built-in ASP.NET Core 2.0 features Use Azure, Amazon Web Services, and Docker to deploy and monitor your applications In Detail The ability to develop web applications that are highly efficient but also easy to maintain has become imperative to many businesses. ASP.NET Core 2.0 is an open source framework from Microsoft, which makes it easy to build cross-platform web applications that are modern and dynamic. This book will take you through all of the essential concepts in ASP.NET Core 2.0, so you can learn how to build powerful web applications. The book starts with a brief introduction to the ASP.NET Core framework and the improvements made in the latest release, ASP.NET Core 2.0. You will then build, test, and debug your first web application very quickly. Once you understand the basic structure of ASP.NET Core 2.0 web applications, you'll dive deeper into more complex concepts and scenarios. Moving on, we'll explain how to take advantage of widely used frameworks such as Model View Controller and Entity Framework Core 2 and you'll learn how to secure your applications. Finally, we'll show you how to deploy and monitor your applications using Azure, AWS, and Docker. After reading the book, you'll be able to develop efficient and robust web applications in ASP.NET Core 2.0 that have high levels of customer satisfaction and adoption. Style and approach Start an exciting journey to building high performance web applications using ASP.NET Core 2.0 and MVC
Building Accessible Apps for iOS and Android
C# 7.1 and .NET Core 2.0 - Modern Cross-Platform Development - Third Edition
Deliver continuous integration and deployment within your mobile applications

Bluetooth LE Projects with Arduino, Raspberry Pi, and Smartphones
Visual Studio Code Distilled
An introductory guide to building cross-platform mobile applications with Flutter and Dart 2